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Thailand

Solid Wood Products

Annual

2003

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Report Highlights:

Thailand's hardwood imports are forecast to increase by 5-8 percent in 2003 and 2004, due to stagnant timber production and increased demand for hardwoods.

Includes PSD Changes: Yes
Includes Trade Matrix: Yes
Annual Report
Bangkok [TH1]
[TH]

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EXECUTIVE SUMMARY

The establishment of the Ministry of Natural Resources and Environment has recently generated confusion in forestry management in Thailand. As a result, some valuable reforestation projects have been suspended. To cope with these problems, the Royal Thai Government of Thailand (RTG) agreed that this new ministry will be responsible for all forest activities by the end of 2003, by acquiring the whole office of the Royal Forest Department from Ministry of Agriculture and Cooperatives.

Reflecting stagnation in commercial production and a declining trend of timber confiscation, timber production from forest areas in the next 3-5 years should still be limited to 30,000-50,000 cubic meters. Meanwhile, production of rubber wood should be basically unchanged for the same period at 1.7-1.8 million cubic meters annually. Demand for hardwoods is forecast to grow favorably due to the bright prospects for construction and interior decorations plus continued growing exports of furniture and interior materials. As a result, Thailand's solid wood product imports are forecast to increase by 5-8 percent in 2003 and 2004. Thai imports of U.S. hardwood are expected to be unchanged in both years.

PRODUCTION

Forest Situation/Outlook

After the vigorous efforts by the Royal Thai Government (RTG) to cope with a deforestation crisis in recent years, the forestry situation is likely to be back at center stage again due mainly to a recent restructuring of the governmental administration responsible for forests. The new Ministry, called the Ministry of Natural Resources and Environment, was established in 2003 in the light of the RTG's efforts to counter the problem of the deteriorating environment and to better manage natural resource utilization.

Prior to 2003, the Royal Forest Department (RFD) under the Ministry of Agriculture and Cooperatives was the chief office in managing forest activities, including forest harvesting, conservation, watershed management, protection, and reforestation. As a result of the new ministry's establishment, there are conflicting roles between it and the Ministry of Agriculture and Cooperatives. The responsibilities of forest protection and conservation were transferred to the Ministry of Natural Resources and Environment, while those of reforestation and utilization still belong to the RFD. This change has apparently created some chaos in the labor forces and budget administration in both agencies. As a result, some valuable reforestation projects have been suspended, including the Private Reforestation Extension Project (PREP), the Fast-Growing Tree Reforestation Extension (FGTRE), and the Community Forest Project (See the details for each project in the 2002 Solid Wood Products Annual Report – TH2072). The only surviving project is the Reforestation Campaign in Commemoration of the Royal Golden Jubilee for the King in 1996. The RTG agreed that the Ministry of Natural Resources and Environment would be responsible for all forestry activities by the end of 2003, by acquiring the whole office of the Royal Forest Department. This was done to better protect the Thai forests.

The Royal Forest Department (RFD) has recently adopted the new methodology of the forest mapping through remote sensing and use of Geographic Information Systems (GIS) technology. Based on this new technology, total forest area in Thailand in 2000 accounted for 33.09 percent of total land area, as opposed to 25.28 percent of total area as officially reported in 1998. Because of the large discrepancy between the old and new figures, and a lack of supportive information from on-ground surveying, the newly released data have not been widely accepted by most of Thai academic counterparts. According to the RFD, the existing forest area in 2000 was 170,110 square kilometers, of which about 96 percent was natural forest. Of the total natural forest area, tropical evergreen forest accounted for 32 percent, followed by mixed deciduous forest (53 percent), dry dipterocarp forest (11 percent), and others (4 percent), respectively. However, the reported forest area does not include rubber plantations of about 15,930 square kilometers in 2002.

In the Agricultural Development Plan, a component of the Ninth National Economic and Social Development Plan (2002-2006), a goal of the national forest policy has been set to conserve and rehabilitate 30 percent of the total country area, including areas for biodiversity conservation, national parks, wildlife sanctuaries, and watersheds. An additional 10 percent of the total country area (around 5.1 million hectares) will be promoted for public forest plantation, private forest plantation, and community forest plantation. In addition, a target area of 1.25 million rai (200,000 hectares) of mangrove forest to be conserved or rehabilitated has been proposed.

Solid Wood Products Situation/Outlook

Due mainly to the government ban on commercial logging in the national forest areas and the immaturity of tree plantations on private reforested land, supplies of domestic hardwood timber are currently obtained from the Forest Industry Organization (FIO)'s logging and thinning activities in their reforested area, and that timber which is confiscated from illegal logging. According to the RFD, production of timber (legally licensed timber and confiscated timber) declined in recent years, reflecting a lack of mature reforested trees and the RFD's sophisticated regulation on logging approval. Total timber production (excluding rubber wood timber production) in 2002 further declined from 41,330 cubic meters in 2001 to 33,600 cubic meters. Despite an anticipated increase in private reforested area in the future, the outlook of domestic timber production from forest areas in the next 3-5 years should still be limited to 30,000-50,000 cubic meters, following a possible stagnant production from the FIO and a declining trend of timber confiscation.

As mentioned in previous reports, the Thai furniture industry has struggled to develop the use of rubber wood from rubber plantation to substitute for typical timber from forest areas. After a high growth in the production of rubber wood in the past decade, production of rubber wood lumber in 2003 and 2004 should be limited to 1.7-1.8 million cubic meters, basically unchanged from the level in 2002. This is mainly because the record high prices for natural rubber products are encouraging many farmers to prolong the tapping of rubber trees.

TRADE

In general, Thailand's solid wood product imports should increase by 5-8 percent in 2003 and 2004, in response to increased market demand in construction, decoration and renovations, and stagnant domestic supplies. Nevertheless, according to trade sources, the Thai imports of U.S. hardwood (in term of quantity) may be basically unchanged in 2003 and 2004, based on the facts that: 1) exports of furniture and frames (which partly use imported U.S. hardwood for manufacturing and re-export) is anticipated to slow down during these two years; 2) the market for wooden flooring materials has been threatened by cheaper laminated MDF flooring materials; 3) supplier countries in Eastern Europe began to offer less-expensive temperate hardwood to compete with U.S. hardwoods.

As indicated in Tables 7, 8, 9, 10, and 11 in the Statistical Information Section, there was remarkable growth in 2002 in imports of tropical hardwood logs (32 percent), tropical hardwood lumber (45 percent), temperate hardwood lumber (79 percent), hardwood plywood (almost 300 percent), and hardwood veneer (48 percent). It should be noted that imports of U.S. lumber also increased significantly in quantity from 156,260 cubic meters in 2001 to 338,441 cubic meters in 2002.

Thailand's neighboring countries (i.e., Malaysia, Burma, Cambodia, Laos, and Indonesia) remain major suppliers of hardwoods to Thailand. Hardwoods imported from Malaysia and Indonesia are mainly used for construction purposes. Meanwhile, high-value tropical hardwoods (such as teak, rose wood, and Ma-ka) are normally imported from Burma, Laos, and Cambodia and used in the furniture and interior design industries. The U.S. supplies solid wood products, mainly hardwood lumber, to Thailand. Most of the imported U.S. hardwoods in 2001 are oak, maple, poplar, and ash. U.S. hardwoods are used for flooring materials, furniture, wooden frames, picture frames, and interior design materials.

It is estimated that about 70 percent of imported U.S. hardwood is now utilized by export-oriented manufacturers, while the balance belongs to domestic-oriented manufacturers. The export-oriented manufacturers import U.S. hardwoods and other temperate hardwoods to make wooden furniture and picture frames. As U.S. woods are mostly competitive in both quality and price against other temperate hardwoods, the demand for imported U.S. hardwoods seems to be a function of the production of wooden products for export. Contrarily, the utilization of U.S. hardwoods by domestic-oriented manufacturers is still limited by a lack of understanding of U.S. woods, in the areas of the U.S. grading system, physical properties, applications, and the color variations of the U.S. species of hardwood. For example, demand for U.S. hardwoods (mainly oak and ash woods) for making flooring materials dropped sharply in recent years, as many local users were disappointed with the appearance and endurance of finished flooring. In reality, according to trade sources, this problem can be avoided if the user is better informed of the physical properties and appropriate application of U.S. woods.

There is a high potential for U.S. hardwood imports to grow in the Thai market, due to their competitive prices and quality. Although domestic consumption of high-value wooden products (such as flooring materials, furniture, and interior design) are dominated by teak/rose wood, the expensive and rising prices for these tropical hardwoods may encourage users to seek new types of hardwoods. However, market strategies to promote U.S. hardwoods in Thailand need to be directed toward overcoming importers' lack of technical awareness as mentioned above. Education should be a key component of market promotion plans. The American Hardwood Export Council (AHEC) should focus on conducting direct discussion/workshops with such target group as wood importers, architects, interior designers, etc. Workshops should be directed to the proper application of specific U.S. hardwoods and their cost-benefit value. AHEC may introduce the new approach like showing how to add "Thai" wood style to new construction using U.S. wood. In addition, AHEC may need to focus on certain species of U.S. hardwoods, but not all of them. For example, according to trade sources, U.S. oak wood has the highest strength for market promotion due to its competitiveness in price and quality, and consistent supplies.

MARKET SEGMENT ANALYSIS

Construction Sector

After a recovery in 2000, the real estate industry in Thailand apparently continues to grow favorably in 2003, following sustainable growth of the Thai economy, the government's measures stimulating demand for housing, and prevailing low market interest rates.

The Thai economy is expected to grow by 5.5 percent in 2003 and 5.0-6.0 percent in 2004, following an expansion in domestic expenditure, in private investment, and in exports. Reflecting the high liquidity in the financial market, overall interest rates for both deposits and loans have decreased sharply in the past few years. The time savings deposit rates continued to drop from 2.0-3.5 percent in August 2002 to currently 0.75-1.0 percent, while the minimum retail rates (MRR) are down from 7.0-8.5 percent to currently 5.75-6.25 percent. Reduced deposit rates have stimulated many wealthy people to spend their savings on buying houses. Meanwhile, reduced loan rates encouraged many medium-income people to borrow and buy houses, mostly for their own residence. In addition, all financial institutions, due to their prevailing high liquidity, have competed aggressively in personal credit loans, especially housing loans.

In addition, the RTG continued measures to revitalize the real estate industry. A

tax on registration for housing ownership was reduced from 2 percent of assessed value prior to the year 2000 to 0.01 percent. The government allowed buyers of residential/commercial buildings to count a certain amount of payment (100,000-200,000 baht) as annual spending for their personal income tax calculation. In the case that the buyers represent a company, they are allowed to deduct 20 percent of the assessed property value as an initial allowance for the corporate income tax calculation. In addition, the Government Housing Bank would provide special loan rates and repayments term for all government employees.

A recent survey indicated that the construction area permitted in the municipal zones in Thailand increased by 55 percent from 8,960 thousand square meters in 2001 to 13,891 thousand square meters in 2002. The construction area permitted in the first 5 months of 2003 (Jan-May) amounted 6,073 thousand square meters. In addition, the new housing in Bangkok and vicinity was 34,035 units in 2002, a level close to 34,023 units in 2001. This new housing in 2002 includes 14,371 units for housing project, 1,971 units for apartment and condominium, and 17,693 units for self-built housing, respectively. The new housing within Bangkok and its vicinity may reach 35,000 units in 2003.

Thai developers and consumers prefer masonry and other non-wood materials in building house structures. While old-style wood-frame houses (mostly seen in rural areas and constructed of tropical wood products) are less popular, new-look-style houses (such as log homes or country houses) are a potential market for imported temperate hardwoods although they are still limited by their high construction costs.

Flooring materials should be the best market prospect for U.S. hardwoods in the construction segment due to an expansion in new house starts, the popularity of the back-to-nature concept, increasing numbers of expensive houses, the growing house-contractor business, and relatively inexpensive flooring materials from U.S. hardwoods. However, this potential may be limited by a lack of regular education/training of Thai contractors or architects on proper U.S. hardwoods in flooring applications, and increased competition from other wooden flooring materials (such as veneered MDF boards or laminated MDF boards).

Furniture & Interior Sector

As mentioned in the last Annual Report, the furniture industry in Thailand has changed dramatically in recent years. In addition to a switch to imported hardwoods, several furniture makers diversified their raw material use into rubber wood, medium density fiberboard (MDF), metal, rattan, etc. Regarding wooden furniture, rubber wood furniture currently accounts for about 70 percent of total production, followed by hardwood furniture (15 percent) and panel furniture (15 percent). Thailand has also diversified its furniture industry toward export-oriented manufacturing. It is estimated that about 70 percent of total wooden furniture production is now for export, with the balance going to domestic consumption.

The outbreak of SARS (Severe Acute Respiratory Syndrome) disease that badly affected the tourism industry in Thailand (and in several Asian countries) from March-June, 2003, may discourage construction of new hotels/resorts and the renovation activities in 2003 and 2004. However, the furniture and interior design products markets are forecast to grow further in 2003 and 2004 following a rapid increase in housing construction and an anticipated growth of furniture exports to some degree.

Construction of new houses and an economic recovery should generate demand for new furniture for house decoration and renovation. Meanwhile, exports of wooden

products, including furniture, are expected to register a 10-15 percent growth (in US dollar terms) in 2003. Exports of wooden furniture and parts in the first half of 2003 (Jan-Jun) increased by 12 percent from the same period in 2002, to US\$ 284.2 million. Meanwhile, exports of other wood products (i.e., wooden construction materials, picture frames, tableware and kitchenware, carvings and ornaments) rose 11 percent to US\$ 351.3 million. The largest importers of Thai wood products are the U.S. (about 37 percent), followed by Japan (28 percent), and EU countries (15 percent). The outlook for Thai wooden product exports in 2004 should continue to grow in anticipation of an economic recovery in the U.S. and Japan.

Material Handling Industry

Wooden pallets are normally used for packaging heavy or fragile products, especially in the shipping industry for export. As most exported products in Thailand are light-industry products and the use of alternative plastic or foam material has increased in popularity, the use of wood in the material handling industry has suffered. Due to relatively high transportation costs, U.S. solid woods are not competitive against domestic woods and those from Thailand's neighboring countries in the material handling industry. Reflecting an estimated increase in Thai exports of electronic and computer equipments, the utilization of solid woods in packing materials should increase from an estimated 100,000-110,000 cubic meters annually in 2003 and 2004, most of which are paranooid and plywood.

Table 1: Thailand's Forest Product Strategic Indicator Tables

(Please do not add/delete rows or columns -- note and other info must be added below row 110 -- thank you!)

CONSTRUCTION MARKET

| Country: Report Year: | 2002 Calendar Year | 2003 Calendar Year | 2004 Calendar Year |
|--|-----------------------|-----------------------|-----------------------|
| Total Housing Starts (thousand units) | 75 | 85 | 95 |
| --of which, wood frame (thousand units) | 5 | 7 | 7 |
| --of which, steel, masonry, other materials (thousand units) | 70 | 78 | 88 |
| --of total starts, residential (thousand units) | 65 | 65 | 68 |
| ----of residential, single family (thousand units) | 62 | 62 | 65 |
| ----of residential, multi-family (thousand units) | 3 | 3 | 3 |
| --of total starts, commercial (thousand units) | 10 | 20 | 27 |
| Total Value of Commercial Construction Market (\$US mil) | 180 | 250 | 300 |
| Total Value of Repair and Remodeling Market (\$US mil) | 360 | 400 | 420 |

FURNITURE & INTERIORS MARKET

| Country: Report Year: | 2002 Calendar Year | 2003 Calendar Year | 2004 Calendar Year |
|--|-----------------------|-----------------------|-----------------------|
| Total Housing Starts (number of units) | 75,000 | 85,000 | 95,000 |
| Total Number of Households | n/a | n/a | n/a |
| Furniture Production (\$US million) | 1,040 | 1,200 | 1,300 |
| Total Furniture Imports (\$US million) | 6 | 10 | 14 |
| Total Furniture Exports (\$US million) | 1,234 | 1,380 | 1,520 |
| Interiors Market Size (\$US million) | 70 | 80 | 90 |

MATERIAL HANDLING MARKET

| Country: Report Year: | 2002 Calendar Year | 2003 Calendar Year | 2004 Calendar Year |
|---|-----------------------|-----------------------|-----------------------|
| Total Value of Industrial Output (\$US million) | n/a | n/a | n/a |
| New Pallet Production (million units) | n/a | n/a | n/a |

FOREST AREA

| Country: Report Year: | 2002 Calendar Year | 2003 Calendar Year | 2004 Calendar Year |
|---|-----------------------|-----------------------|-----------------------|
| Total Land Area (million hectares) | 51.20 | 51.20 | 51.20 |
| Total Forest Area (million hectares) | 17.01 | 17.01 | 17.01 |
| --of which, Commercial ('000 hectares) | 660 | 660 | 660 |
| ----of commercial, tropical hardwood ('000 hectares) | 660 | 660 | 660 |
| ----of commercial, temperate hardwood ('000 hectares) | 0 | 0 | 0 |
| ----of commercial, softwood ('000 hectares) | 0 | 0 | 0 |
| Forest Type | | | |
| --of which, virgin ('000 hectares) | 15,510 | 15,505 | 15,500 |
| --of which, plantation ('000 hectares) | 1,490 | 1,495 | 1,495 |
| --of which, other commercial (regrowth) ('000 hectares) | 10 | 10 | 10 |
| Total Volume of Standing Timber (thousand cubic meters) | 1,573,400 | 1,574,000 | 1,574,800 |
| --of which, Commercial Timber ('000 cum) | 62,000 | 64,000 | 65,000 |
| Annual Timber Removal ('000 cum) 1/ | 6,100 | 6,200 | 6,200 |
| Annual Timber Growth Rate ('000 cum) | 15,950 | 15,950 | 15,950 |
| Annual Allowable Cut ('000 cum) | 5,320 | 5,330 | 5,340 |

1/ If Removals exceeds growth rate, analyze impact in text.

WOOD PRODUCTS SUBSIDIES

| Country: Year of Report | 2002 Calendar Year | 2003 Calendar Year | 2004 Calendar Year |
|---|-----------------------|-----------------------|-----------------------|
| Total Solid Wood Export Subsidy Outlay (\$US million) | 0 | 0 | 0 |
| Is there a ban on the export of logs, lumber, or veneer? 1/ | No | No | No |
| Are there export taxes (yes/no)? 2/ | Yes | Yes | Yes |
| Total Wood Production Subsidy (\$US million) | 0 | 0 | 0 |
| Scope (thousands of hectares) | 0 | 0 | 0 |
| Are there other wood products export expansion activities? 1/ | No | No | No |

1/ If yes, describe in report.

2/ If yes, identify in Tariff and Tax Strategic Indicator Table.

FOREST PRODUCT TARIFFS AND TAXES (percent)

| Country: Report Year: | Product Description 1/ | Tariff Current Year | Tariff Following Year | Other Import Taxes/Fees | Total Cost of Import 2/ | Export Tax |
|---|---------------------------|---------------------------|-----------------------------|-------------------------------|----------------------------|---------------|
| 4401 | | 1.0 | 1.0 | 7% Vat | 8.1 | 40.0 |
| 4403 | | 1.0 | 1.0 | 7% Vat | 8.1 | 40.0 |
| 4404 | | 1.0 | 1.0 | 7% Vat | 8.1 | 40.0 |
| 4405 | | 1.0 | 1.0 | 7% Vat | 8.1 | 40.0 |
| 4406 | | 1.0 | 1.0 | 7% Vat | 8.1 | 40.0 |
| 4407 | | 1.0-5.0 | 1.0-5.0 | 7% Vat | 8.07-12.35 | 40.0 |
| 4408 | | 1.0 | 1.0 | 7% Vat | 8.1 | 40.0 |
| 4409 | | 20.0 | 20.0 | 7% Vat | 28.4 | 40.0 |
| 4410 | | 20.0 | 20.0 | 7% Vat | 28.4 | 0.0 |
| 4411 | | 20.0 | 20.0 | 7% Vat | 28.4 | 0.0 |
| 4412 | | 20.0 | 20.0 | 7% Vat | 28.4 | 0.0 |
| 4413 | | 10.0 | 10.0 | 7% Vat | 17.7 | 0.0 |
| 4414 | | 30.0 | 30.0 | 7% Vat | 39.1 | 0.0 |
| 4415 | | 30.0 | 30.0 | 7% Vat | 39.1 | 0.0 |
| 4416 | | 30.0 | 30.0 | 7% Vat | 39.1 | 0.0 |
| 4417 | | 30.0 | 30.0 | 7% Vat | 39.1 | |
| 4418 | | 30.0 | 30.0 | 7% Vat | 39.1 | 0.0 |
| 4419 | | 30.0 | 30.0 | 7% Vat | 39.1 | 0.0 |
| 4420 | | 30.0 | 30.0 | 7% Vat | 39.1 | 0.0 |
| 4421 | | 30.0 | 30.0 | 7% Vat | 39.1 | 0.0 |
| 4422 | | n/a | n/a | 7% Vat | n/a | n/a |
| 4423 | | n/a | n/a | 7% Vat | n/a | n/a |
| 4424 | | n/a | n/a | 7% Vat | n/a | n/a |
| 4425 | | n/a | n/a | 7% Vat | n/a | n/a |
| Pre-fabricated Houses, a subsection under chapter | | | | | | |

1/ Insert additional lines for Commodity tariff identification should tariffs vary within the four-digit designation for major products exported by the U.S. (e.g., 4412.19: softwood plywood 3%, 4412.XX: other plywood, 9%).

2/ Calculate as tariff plus other import taxes/fees assuming a commodity value of \$100.

Table 2: PS&D Table for Tropical Hardwood Logs

PSD Table

| Country | Thailand | | | | | | |
|----------------------|--|----------|-------------|----------|-------------|----------|-------------------|
| Commodity | Tropical Hardwood Logs 1000 CUBIC METERS | | | | | | |
| | 2002 | Revised | 2003 | Estimate | 2004 | Forecast | UOM |
| | USDA Official | Estimate | DA Official | Estimate | DA Official | Estimate | [New] |
| Market Year Begin | 01/2002 | | 01/2003 | | 01/2004 | | MM/YYYY |
| Production | 4850 | 4850 | 4800 | 4800 | 0 | 4700 | 1000 CUBIC METERS |
| Imports | 500 | 580 | 500 | 620 | 0 | 750 | 1000 CUBIC METERS |
| TOTAL SUPPLY | 5350 | 5430 | 5300 | 5420 | 0 | 5450 | 1000 CUBIC METERS |
| Exports | 0 | 0 | 0 | 0 | 0 | 0 | 1000 CUBIC METERS |
| Domestic Consumption | 5350 | 5430 | 5300 | 5420 | 0 | 5450 | 1000 CUBIC METERS |
| TOTAL DISTRIBUTION | 5350 | 5430 | 5300 | 5420 | 0 | 5450 | 1000 CUBIC METERS |

Table 3: PS&D Table for Temperate Hardwood Lumber

PSD Table

| Country | Thailand | | | | | | |
|----------------------|---|----------|-------------|----------|-------------|----------|-------------------|
| Commodity | Temperate Hardwood Lumber 1000 CUBIC METERS | | | | | | |
| | 2002 | Revised | 2003 | Estimate | 2004 | Forecast | UOM |
| | USDA Official | Estimate | DA Official | Estimate | DA Official | Estimate | [New] |
| Market Year Begin | 01/2002 | | 01/2003 | | 01/2004 | | MM/YYYY |
| Production | 8 | 18 | 5 | 20 | 0 | 25 | 1000 CUBIC METERS |
| Imports | 200 | 295 | 210 | 310 | 0 | 320 | 1000 CUBIC METERS |
| TOTAL SUPPLY | 208 | 313 | 215 | 330 | 0 | 345 | 1000 CUBIC METERS |
| Exports | 5 | 2 | 5 | 5 | 0 | 5 | 1000 CUBIC METERS |
| Domestic Consumption | 203 | 311 | 210 | 325 | 0 | 340 | 1000 CUBIC METERS |
| TOTAL DISTRIBUTION | 208 | 313 | 215 | 330 | 0 | 345 | 1000 CUBIC METERS |

Table 4: PS&D Table for Tropical Hardwood Lumber

PSD Table

| Country | Thailand | | | | | | |
|----------------------|--|----------|-------------|----------|-------------|----------|-------------------|
| Commodity | Tropical Hardwood Lumber 1000 CUBIC METERS | | | | | | |
| | 2002 | Revised | 2003 | Estimate | 2004 | Forecast | UOM |
| | USDA Official | Estimate | DA Official | Estimate | DA Official | Estimate | [New] |
| Market Year Begin | 01/2002 | | 01/2003 | | 01/2004 | | MM/YYYY |
| Production | 2300 | 2600 | 2280 | 2500 | 0 | 2500 | 1000 CUBIC METERS |
| Imports | 1100 | 1480 | 1200 | 1530 | 0 | 1600 | 1000 CUBIC METERS |
| TOTAL SUPPLY | 3400 | 4080 | 3480 | 4030 | 0 | 4100 | 1000 CUBIC METERS |
| Exports | 350 | 1559 | 400 | 1100 | 0 | 800 | 1000 CUBIC METERS |
| Domestic Consumption | 3050 | 2521 | 3080 | 2930 | 0 | 3300 | 1000 CUBIC METERS |
| TOTAL DISTRIBUTION | 3400 | 4080 | 3480 | 4030 | 0 | 4100 | 1000 CUBIC METERS |

Table 5: PS&D Table for Hardwood Veneer

PSD Table

| Country Commodity | Thailand Hardwood Veneer | | | | | | |
|----------------------|-----------------------------|--------------|-------------|--------------|-------------|----------------|-------------------|
| | 1000 CUBIC METERS | | | | | | |
| | 2002 | Revised | 2003 | Estimate | 2004 | Forecast | UOM |
| | USDA Official | Estimate [D] | DA Official | Estimate [D] | DA Official | Estimate [New] | |
| Market Year Begin | 01/2002 | | | 01/2003 | | 01/2004 | MM/YYYY |
| Production | 155 | 155 | 160 | 160 | 0 | 165 | 1000 CUBIC METERS |
| Imports | 15 | 18 | 20 | 20 | 0 | 25 | 1000 CUBIC METERS |
| TOTAL SUPPLY | 170 | 173 | 180 | 180 | 0 | 190 | 1000 CUBIC METERS |
| Exports | 2 | 2 | 2 | 2 | 0 | 2 | 1000 CUBIC METERS |
| Domestic Consumption | 168 | 171 | 178 | 178 | 0 | 188 | 1000 CUBIC METERS |
| TOTAL DISTRIBUTION | 170 | 173 | 180 | 180 | 0 | 190 | 1000 CUBIC METERS |

Table 6: PS&D Table for Hardwood Plywood

PSD Table

| Country Commodity | Thailand Hardwood Plywood | | | | | | |
|----------------------|------------------------------|--------------|-------------|--------------|-------------|----------------|-------------------|
| | 1000 CUBIC METERS | | | | | | |
| | 2002 | Revised | 2003 | Estimate | 2004 | Forecast | UOM |
| | USDA Official | Estimate [D] | DA Official | Estimate [D] | DA Official | Estimate [New] | |
| Market Year Begin | 01/2002 | | | 01/2003 | | 01/2004 | MM/YYYY |
| Production | 85 | 85 | 90 | 90 | 0 | 95 | 1000 CUBIC METERS |
| Imports | 10 | 22 | 10 | 30 | 0 | 35 | 1000 CUBIC METERS |
| TOTAL SUPPLY | 95 | 107 | 100 | 120 | 0 | 130 | 1000 CUBIC METERS |
| Exports | 2 | 3 | 2 | 5 | 0 | 10 | 1000 CUBIC METERS |
| Domestic Consumption | 93 | 104 | 98 | 115 | 0 | 120 | 1000 CUBIC METERS |
| TOTAL DISTRIBUTION | 95 | 107 | 100 | 120 | 0 | 130 | 1000 CUBIC METERS |

Table 7: Thailand's Tropical Hardwood Log Imports in 2001 and 2002

Import Trade Matrix

Country Thailand

Commodity Tropical Hardwood Logs

| | | | |
|-------------------|---------|----------------|--------|
| Time Period | Jan-Dec | Units: | CuM |
| Imports for: | 2001 | | 2002 |
| U.S. | 0 | U.S. | 0 |
| Others | | Others | |
| Malaysia | 83186 | Malaysia | 104741 |
| Burma | 123611 | Burma | 385831 |
| Laos | 98613 | Laos | 4020 |
| Indonesia | 107319 | Indonesia | 23252 |
| India | 438 | Papua N. | 18467 |
| Gabon | 5587 | Gabon | 11235 |
| Solomon Island | 11602 | Solomon Island | 18615 |
| S. Africa | 5330 | S. Africa | 5594 |
| | | Maldives | 1378 |
| | | | |
| Total for Others | 435686 | | 573133 |
| Others not Listed | 362 | | 6591 |
| Grand Total | 436048 | | 579724 |

Table 8: Thailand's Temperate Hardwood Lumber Imports in 2001 and 2002

Import Trade Matrix

Country Thailand

Commodity Temperate Hardwood Lumber

| | | | |
|-------------------|---------|-------------|--------|
| Time Period | Jan-Dec | Units: | CuM |
| Imports for: | 2001 | | 2002 |
| U.S. | 156260 | U.S. | 338441 |
| Others | | Others | |
| New Zealand | 46114 | New Zealand | 58199 |
| China | 3959 | China | 4708 |
| Canada | 18040 | Canada | 11540 |
| Sweden | 1503 | Sweden | 10448 |
| Germany | 2231 | Germany | 3108 |
| Australia | 3213 | Australia | 3324 |
| Finland | 2206 | Finland | 3062 |
| Austria | 1673 | Austria | 1496 |
| | | | |
| | | | |
| Total for Others | 78939 | | 95885 |
| Others not Listed | 12183 | | 10374 |
| Grand Total | 91122 | | 106259 |

Table 9: Thailand's Tropical Hardwood Lumber Imports in 2001 and 2002

Import Trade Matrix

Country Thailand

Commodity Tropical Hardwood Lumber

Time Period **Jan-Dec** Units: **CuM**

Imports for: **2001** **2002**

U.S. **0** U.S. **0**

Others Others

| | | | |
|-----------|--------|-----------|---------|
| Malaysia | 650934 | Malaysia | 1012092 |
| Laos | 304106 | Laos | 374261 |
| Burma | 20238 | Burma | 24208 |
| Brazil | 38835 | Brazil | 47337 |
| Indonesia | 11185 | Indonesia | 7024 |
| Cambodia | 5116 | Cambodia | 4476 |
| S. Africa | 542 | S. Africa | 474 |
| Chile | 4477 | Chile | 6025 |
| India | 2967 | Namibia | 1640 |
| Uruguay | 732 | | |

Total for Others 1039132 1477537

Others not Listed 1794 32825

Grand Total 1040926 1510362

Table 10: Thailand's Hardwood Veneer Imports in 2001 and 2002

Import Trade Matrix

Country Thailand

Commodity Hardwood Veneer

| | | | |
|-------------------|---------|-----------|-------|
| Time Period | Jan-Dec | Units: | CuM |
| Imports for: | 2001 | | 2002 |
| U.S. | 859 | U.S. | 1127 |
| Others | | Others | |
| Indonesia | 1624 | Indonesia | 1757 |
| Malaysia | 1353 | Malaysia | 4788 |
| Finland | 1091 | Finland | 1399 |
| China | 1816 | China | 2032 |
| Germany | 238 | Germany | 508 |
| Brazil | 1464 | Brazil | 1312 |
| Taiwan | 628 | Taiwan | 138 |
| Burma | 1188 | Burma | 2805 |
| Japan | 303 | Japan | 36 |
| Laos | 688 | Laos | 1559 |
| Total for Others | 10393 | | 16334 |
| Others not Listed | 886 | | 493 |
| Grand Total | 11279 | | 16827 |

Table 11: Thailand's Hardwood Plywood Imports in 2001 and 2002

Import Trade Matrix

Country Thailand

Commodity Hardwood Plywood

| | | | |
|-------------------|---------|-----------|-------|
| Time Period | Jan-Dec | Units: | CuM |
| Imports for: | 2001 | | 2002 |
| U.S. | 8 | U.S. | 3 |
| Others | | Others | |
| Indonesia | 5074 | Indonesia | 9086 |
| Malaysia | 1366 | Malaysia | 8543 |
| Laos | 296 | Laos | 266 |
| Taiwan | 274 | Taiwan | 639 |
| Singapore | 385 | Singapore | 1706 |
| China | 391 | China | 115 |
| Burma | 0 | Burma | 1046 |
| | | | |
| | | | |
| | | | |
| Total for Others | 7786 | | 21401 |
| Others not Listed | 57 | | 570 |
| Grand Total | 7843 | | 21971 |

Table 12: Thailand's Tropical Hardwood Log Exports in 2001 and 2002

Export Trade Matrix

Country Thailand

Commodity Tropical Hardwood Logs

| | | | |
|-------------------|---------|--------|------|
| Time Period | Jan-Dec | Units: | CuM |
| Exports for: | 2001 | | 2002 |
| U.S. | 0 | U.S. | 0 |
| Others | | Others | |
| Malaysia | 155 | China | 2866 |
| Yemen | 177 | Laos | 17 |
| Burma | 14 | India | 174 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Total for Others | 346 | | 3057 |
| Others not Listed | 1 | | 0 |
| Grand Total | 347 | | 3057 |

Table 13: Thailand's Tropical Hardwood Lumber Exports in 2001 and 2002

Export Trade Matrix

Country Thailand

Commodity Tropical Hardwood Lumber

| | | | |
|-------------------|---------|-------------|---------|
| Time Period | Jan-Dec | Units: | CuM |
| Exports for: | 2001 | | 2002 |
| U.S. | 10306 | U.S. | 11514 |
| Others | | Others | |
| China | 157448 | China | 844052 |
| Hong Kong | 144004 | Hong Kong | 577601 |
| Vietnam | 16644 | Vietnam | 14084 |
| Malaysia | 10685 | Malaysia | 49439 |
| Taiwan | 6080 | Taiwan | 8077 |
| Australia | 4005 | Australia | 4402 |
| Japan | 32390 | Japan | 30000 |
| Netherlands | 2754 | Netherlands | 1751 |
| Belgium | 1285 | Belgium | 2539 |
| Germany | 1832 | Germany | 2108 |
| Total for Others | 377127 | | 1534053 |
| Others not Listed | 15123 | | 13598 |
| Grand Total | 392250 | | 1547651 |

Table 14: Thailand's Hardwood Veneer Exports in 2001 and 2002

Export Trade Matrix

Country Thailand

Commodity Hardwood Veneer

| | | | |
|-------------------|---------|-------------|------|
| Time Period | Jan-Dec | Units: | CuM |
| Exports for: | 2001 | | 2002 |
| U.S. | 75 | U.S. | 140 |
| Others | | Others | |
| Denmark | 665 | Denmark | 623 |
| U.K. | 233 | U.K. | 163 |
| France | 227 | France | 209 |
| Germany | 102 | Germany | 80 |
| Italy | 63 | Italy | 91 |
| Finland | 52 | Finland | 70 |
| Netherlands | 81 | Netherlands | 120 |
| Sweden | 79 | Sweden | 61 |
| Singapore | 32 | Singapore | 44 |
| Malaysia | 61 | Malaysia | 42 |
| Total for Others | 1595 | | 1503 |
| Others not Listed | 316 | | 256 |
| Grand Total | 1911 | | 1759 |

Table 15: Thailand's Hardwood Plywood Exports in 2001 and 2002

Export Trade Matrix

Country Thailand

Commodity Hardwood Plywood

| | | | |
|-------------------|---------|------------|------|
| Time Period | Jan-Dec | Units: | CuM |
| Exports for: | 2001 | | 2002 |
| U.S. | 170 | U.S. | 23 |
| Others | | Others | |
| India | 1346 | India | 1484 |
| Bangladesh | 501 | Bangladesh | 159 |
| U.K. | 125 | U.K. | 152 |
| Hong Kong | 196 | Hong Kong | 0 |
| Laos | 47 | Laos | 100 |
| Cambodia | 128 | Cambodia | 0 |
| Singapore | 74 | Singapore | 0 |
| Nepal | 27 | Nepal | 45 |
| Pakistan | 32 | Pakistan | 47 |
| | | | |
| Total for Others | 2476 | | 1987 |
| Others not Listed | 91 | | 1019 |
| Grand Total | 2567 | | 3006 |

End of Report